

RECYCLING NEWS



* Spring 2005 *

Governor Proclamation Celebrates 10 Years of Successful Recycling in Wisconsin

Cynthia Moore, DNR Recycling Team leader

MADISON - Gov. Jim Doyle highlighted the success of Wisconsin's recycling program by issuing a proclamation recognizing 2005 as the tenth anniversary of the full implementation of the recycling program in Wisconsin. In his proclamation, Governor Doyle noted that the enthusiastic support of Wisconsin's citizens for the recycling program is good for both the state's environment and economy. Ten years after Wisconsin established what would become a nationally recognized recycling program, more than 90 percent of the state's households continue to participate, diverting an estimated 1.6 million tons of material from landfills annually and contributing

to the \$5.4 billion environmental industry in Wisconsin that supports 97,000 jobs.

Wisconsin's comprehensive recycling program was signed into law on Earth Day, April 22, 1990 and fully implemented in 1995. The recycling law emphasizes the state's commitment to waste reduction, reuse and recycling as the preferred ways to manage wastes, rather than disposal, says Cynthia Moore, recycling coordinator for the state Department of Natural Resources. Moore adds, "With the goal of supporting the recycling industry, Wisconsin was the first state to implement statewide bans on landfilling large appliances, used motor oil, vehicle batteries, yard



waste, aluminum cans, corrugated paper, glass containers, magazines, newspapers, office paper, plastic containers and steel containers".



DNR UpdatesRevisions to the Recycling Rules

Cynthia Moore, DNR Recycling Team Leader

The Department of Natural Resources has been working on revisions to the recycling rules since March 2004. These revisions represent the first systematic review to the recycling rules since they were adopted over 10 years ago. The intent is to eliminate obsolete language, reaffirm the original intent and scope of recycling requirements, and update the code to reflect advances in technology and markets.

The rules are currently in legislative committee, having been adopted by the Natural Resources Board at their February 2005 meeting. Barring any unforeseen problems, the rules are expected to become effective within the next few months. Responsible Units (RUs) and recycling services and facilities will be notified when more is known, and the Department will

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Revisions to the Recycling Rules Continued

provide guidance on how to comply with revisions where there is an impact on program implementation or service provision. You can check on the progress of the rule revisions on our website: http://dnr.wi.gov/ org/aw/wm/recycle/proprules/ index.htm.

Highlights of rule revisions:

- 1. Clarifies the definition of "Non residential facilities and properties".
 - Clarifying this definition reinforces that the law requires all non-residential facilities and properties, in addition to residents of residential dwellings, to comply with Wisconsin's Recycling Law. The modified rule language clarifies that this requirement extends to properties under construction or demolition, and locations used for special events (sporting events, summer fairs, parks, etc.)
- 2. Eliminates the requirement to obtain Department approval to use a single stream collection system. Single stream collection involves co-mingling of recyclable fiber and containers at the collection site and sorting them into the different marketable commodity groups at the processing facility. The rule revisions eliminate the need to obtain Department approval to convert to a single stream collection program, provided recyclable materials are processed by a Department selfcertified materials recovery
- 3. Requires haulers to notify clients of state and local laws requiring recycling as part of their license conditions.
- facility (MRF).

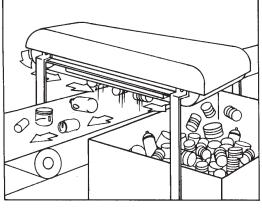


4. Requires Responsible Units to complete a Compliance Assurance Plan within one year.

One of the necessary components of effective recycling program approval includes having a "means of adequately enforcing the requirements" of the local recycling program [NR 544.04(9) and 544.06 (2) (e)]. Implementing a Compliance Assurance Plan (CAP) will ensure that all RUs have established a systematic procedure to address at a minimum one commonly encountered noncompliance. In most cases, the RU will be able to meet the CAP requirement simply by putting into writing their established procedures. The Department will provide written guidance to help RUs that have not developed this functionality, and will draw on effective procedures used by other RUs.

Other changes under the revisions include

- * modifying the definition of a rural community to include population density to account for growth in communities which have maintained their rural character
- * adding language to clarify that RUs must ensure that all residents are using a recycling service if the RU has chosen to



- rely on individual household service contracts for their curbside recycling program
- * revising the definition to a materials recovery facility to be consistent with the statutory definition and conditionally exempt single commodity materials recovery facilities from the self-certification requirement by rule rather than by definition
- * requiring a Department selfcertified materials recovery facility to resubmit a selfcertification each year, rather than only upon change of their operation or situation.

The Department worked collaboratively with representatives of industry and RUs to draft rule language and continued this joint work effort through the public hearing process. We would like to recognize the contribution of our stakeholders and the support of the Council on Recycling in developing a product which enhances the authority of local government recycling programs, streamlines regulatory processes and respects the business needs and practices of industry. With your help we have put together a rule package that will satisfy everyone's needs. 🐴



Deadlines and Procedures for 2006 Recycling Grant Applications

Candice Sovinski, DNR Recycling Grants Manager

Responsible Units (RUs) – defined as the local unit of government responsible for implementing its recycling program – are eligible for state grant funding to operate effective recycling and yard waste management programs. RUs are eligible for two Recycling Grants programs:

- the Basic recycling grant program which provides financial assistance for eligible recycling costs incurred in residential recycling and yard waste programs; and
- 2. the Recycling Efficiency Incentive Grants which reward eligible "acts of efficiency" implemented by the RU.

Applications for each recycling grant program must be submitted each year by the RU under procedures set by state law. It is very important for RUs to submit complete applications within the established deadlines - failure to do so results in penalties either reducing the amount of the grant awarded or rendering the RU ineligible for that year's grant cycle.

On-line notification

Effective in 2005, recycling grant application packets will no longer be automatically mailed to RUs. Starting July 2005, application materials for calendar year 2006 Recycling Grants will be available on-line. Hard copies will only be available upon request. The deadlines to submit grant applications are listed below.

DEADLINES for Grant Application Submittals: All dates shown are postmark deadlines

For Basic Recycling Grants to Responsible Units in 2006

To receive 100% funding	October 01, 2005
To receive 95% funding	October 10, 2005
To receive 90% funding	
To receive 75% funding	
To receive 0% funding	

For Recycling Efficiency Incentive Grants in 2006

To receive 100% funding	October 31, 2005
To receive 0% funding	November 1 or later

To be eligible for funding, the form(s) must be printed out, signed and mailed by the postmark deadline to:

Bureau of Community Financial Assistance Recycling Grants, CF/8 Department of Natural Resources P.O. Box 7921 Madison, WI 53707

For questions on the Recycling Grants, contact Candice Sovinski, Recycling Grants Manager, by phone at 608-264-9207 or via email at candice.sovinski@dnr.state.wi.us

Basic recycling grant application

1. To receive the Basic Grant application on-line, go to to:http://www.dnr.state.wi.us/org/caer/cfa/Grants/Recycle/recycle.html

From this web page, you will want to download the following items:

- ★ Cover letter and Instructions (8700-222S)
- * Application forms (8700-222S)
- 2. To obtain Basic Grant application materials through the mail

Please contact Diane Glodoski, Recycling Grants Program Assistant, by phone at 608-264-8902 or via email at diane.glodoski@dnr.state.wi.us Application materials and instructions will be mailed to you.

Recycling Efficiency Incentive Grants

If also requesting funds through the Recycling Efficiency Incentive (REI) grant program, we recommend you complete and submit that application at the same time as the Recycling Grants to Responsible Units application. Information on the REI grant application procedures is available on-line at: http://dnr.wi.gov/org/caer/cfa/Grants/Recycle/efficiency.html.

Revisions to the 2004 Recycling Annual Report

Cynthia Moore, DNR Recycling Team Leader

The 2004 Recycling Annual Report form, required of all Responsible Units, was mailed out on March 18, 2005. If you have not received your report package, please contact your regional recycling specialist as soon as possible. The deadline for submittal of the 2004 Annual Report is April 30, 2005. The 2004 Recycling Annual Report had three significant changes this year, which were:

- 1. On-line reporting: Following a successful pilot test in the 2003 report year, we offered this option to all RUs for the 2004 report year. The decision to use the on-line report was voluntary, however we encouraged all RUs to consider this option. Feedback from our pilot testers confirms that it is easy to use. It also eliminates time consuming data entry, minimizes the potential for data entry errors, and will enable the Department to process the data more quickly. We will not be accepting on-line submittals after the April 30 deadline. If you missed the deadline for on-line reporting this year, keep it in mind for next year.
- 2. Streamlined reporting: Consistent with the Department's efforts to streamline reporting procedures, the Recycling Annual Report has undergone a facelift to facilitate reporting and minimize openended questions. Most RUs we have heard back from like the ease of the new format. We have heard from a few RUs that they preferred having open-ended questions- this gave them the opportunity to tell us the good things they were doing. By all means, continue to tell us these things in the space provided at the end of the report (Additional Information).

3. Multi-family residential weights: New this year is the option to report collection of recyclables from multi-family residential dwellings. A number of RUs with significant multifamily residential dwelling populations collect recyclables from these households but, until this year, have not been able to get credit for their work. We have modified the form to enable those RUs to include these weights in the calculation of the collection standard.



However, this change does *NOT* make the collection costs from multi-family residential dwellings grant eligible costs.

Wisconsin Recycling Markets Directory Now Online

The 2005 update of the Wisconsin Recycling Markets Directory is now online. The Markets Directory contains information from almost 300 recycling businesses that accept Wisconsin recycled materials. Directory users can generate custom lists of markets for various recyclables, view up-to-date information on current recycling issues and locate additional resources for recycling markets.

The Markets Directory has changed over time to reflect the changes in the recycling industry. While markets for traditional markets such as glass, plastic, paper, and metals are still identified, the directory now also provides market contacts for cell phones, computer components, televisions, construction and demolition debris, fluorescent bulbs, and other new recycling opportunities.

This year, DNR asked businesses listed in the markets directory to comment on the usefulness of the directory. Over 75% of the respondents expressing an opinion indicated that they either knew or believed that customers contacted them because of the Wisconsin Markets Directory. Additionally, 47% of the business respondents indicated that they used the Markets Directory to identify additional markets for recycled materials.

The Wisconsin Recycling Markets Directory home page can be viewed at http://dnr.wi.gov/org/aw/wm/Markets/. Users can also go directly to the materials search page at http://dnr.wi.gov/markets.

DNR Recommendations on "Compostable" Yard Waste Plastic Bags

Cynthia Moore, DNR Recycling Team Leader

Wisconsin law [s. 287.08, Stats.] prohibits putting bagged yard waste in a solid waste treatment or storage facility "unless the bag is constructed of a material that decomposes within a reasonable time after exposure to weather elements and is labeled as being so constructed".

The Department encourages onsite composting or on-site mulching of yard waste over bagging, but recognizes that this is not always feasible or appropriate under certain circumstances. Residents interested in using yard waste bags should first check with their local recycling program to make sure that bagged yard waste is accepted as some local programs specifically prohibit bagging of yard waste destined for collection, or have restrictions of the type of bag which can be used. A variety of commercial yard waste bags are currently on the market, although not always available in all communities. Kraft paper bags generally will meet Department requirements for decomposition provided they are not fortified with non-decomposable plastic lining or coating.

In addition to kraft paper yard waste bags, a number of plastic "decomposable" bags are currently on the market. To determine whether or not these meet DE-PARTMENT requirements, we recommend that local governments require use of bags which meet the

ASTM D6400 Standard Specification for Compostable Plastics or D6868 Standard Specification for Biodegradable Plastics Used as Coatings on Paper and Other Compostable Substrates, as appropriate. Guidance is now available on the DEPARTMENT website: http://dnr.wi.gov/org/aw/wm/publications/recycle/publwa-423-05.pdf.

Finally, it is also good practice for a RU to confirm the materials will degrade at the compost facility in use. A small trial or pilot with bags may be beneficial in choosing a bag to use. A process to tear bags open at the compost facility may also be necessary so as to expose the contents to oxygen needed for oxygen to take place. Measures may also be needed to ensure non-degradable bags are not inadvertently delivered to the composting facility.

'Remix' Project Aims To Boost Magazine Recycling

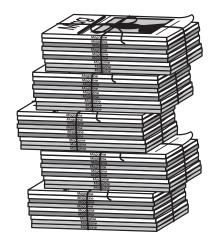
Dan Fields, DNR

Waukesha County and the City of Milwaukee are have been selected from a pool of nationwide candidates to be part of a campaign with national business and non-profit partners aimed at increasing recycling of magazines and catalogs. This innovative partnership was created by national partners that include the National Recycling Coalition, Time Inc., International Paper and recyclers FCR and Recycle America Alliance (RAA). Locally, the partnership will include Quad/Graphics and Be SMART, the southeastern Wisconsin publicprivate sector initiative that provides leadership and promotes waste reduction, resource conservation and pollution prevention.

Building on the area's strong record of recycling and high magazine readership, the ReMix — Recycling Magazines is Excellent — campaign is designed to inform residents that they can easily include magazines and catalogs with their other paper recycling. By doing so, they will divert magazines and catalogs from landfills and provide significant economic benefits to the local community.

The project will include a multifaceted media campaign designed to build awareness and increase the magazine recycling rate in the metropolitan Milwaukee area. "With the high price and demand for all types of paper, this project is coming at a perfect time" according to Cynthia Moore, DNR Recycling Team Leader. "Raising awareness about magazine recycling, currently hovering around 30%, will have the additional effect of raising the recycling rate for all types of paper, helping all the paper mills in Wisconsin."

The Waukesha/Milwaukee project is the first of four pilots intended for Phase II of the national ReMix project. Pilots of the first phase were Boston, MA and Prince George's County, MD.



Two New Fact Sheets Available from SHWEC

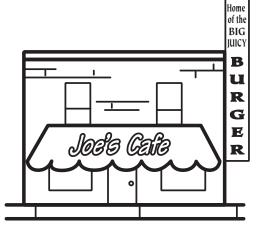
Joe Van Rossum, Recycling Specialist

The University of Wisconsin Extension's Solid & Hazardous Waste Education Center (SHWEC) has compiled two new fact sheets; one focusing on recycling strategies for small businesses and the other providing alternative uses for recovered glass. These fact sheets as well as other recycling and solid waste publications are available on the Publication page of SHWEC's website (www.uwex.edu/shwec), or contact your County Extension office for a copy of these fact sheets.

"Waste Management Strategies for Small Businesses" provides guidance to businesses owners for dealing with waste produced during the course of doing business. In a perfect world a business would not produce any waste. One hundred percent of all raw material inputs would leave the production floor or office as a product. Very few, if any, businesses ever achieve this 100% product goal, therefore a sound waste management strategy is needed to minimize the cost and liability associated with the management of waste materials. This guide serves as an introduction to processes that can have a positive affect upon a business' bottom line. A management strategy should focus on efforts to reduce or recycle waste rather than to continue to rely upon disposal.

The fact sheet can be found online at www.uwex.edu/shwec/ Pubs/pdf/Small%20Business%20 Waste.pdf

Rising transportation costs along with other factors have led some recycling programs to explore non-cullet markets for recovered glass. "Alternative Uses for Post-Consumer Glass" is a summary of these glass reuse applications. The fact sheet also intends to raise awareness about regulatory requirements that



may be associated with some of these reuse options.

Many recycling programs have utilized glass as an aggregate product for road construction projects during the past 10 years. This new fact sheet provides several examples of beneficial reuse projects for recovered glass going beyond some of the traditional uses. The applications profiled include some that have been used in Wisconsin projects, while others have yet to be attempted in the state. This publication also contains information about the need to acquire a "beneficial reuse" exemption from the Wisconsin Department of Natural Resources that may be required for certain glass reuse applications.

The fact sheet can be found online at www.uwex.edu/shwec/Pubs/pdf/

Glass%20Alternative%20Uses.pdf

Contact information: Joe Van Rossum, SHWEC Recycling Specialist, 608-262-0936 or vanrossum@epd.engr.wisc.edu

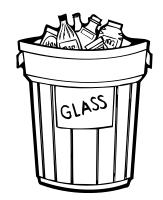
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This publication is available in alternative format (large print, Braille, audiotape etc.) upon request. Please call 608/266-2111 for more information.

Articles and descriptions of programs/activities by non-DNR staff included in this newsletter are for informational purposes only and should not be construed as DNR endorsements of other organizations' opinions or programs.

Graphic Design by L. Pohlod, Blue Sky Design, LLC



What we hear from our readers

We encourage our readers to submit articles for the Recycling News on topics of general interest and concern to the public. We try to reprint them in their original wording, although do reserve the right to edit where we feel is necessary to preserve the integrity of our newsletter. Opinions expressed are those of the authors and do not necessarily reflect those of Department or of the Recycling Program.

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Landfills..., Is bigger, better?

Bart Sexton, Oneida County Solid Waste Administrator

The main result of lengthening leachate lines is that landfills in Wisconsin can now be significantly taller. With leachate lines 1,200 feet long, the maximum height of a landfill was about 150 feet. With 2,000 feet of leachate lines, that height will increase to around 250 feet.

As Wisconsin becomes more populated, landfills are becoming harder to site. The NIMBY (Not In My Back Yard) syndrome is quite understandable when it comes to sanitary landfills. NIMBY and economic factors are also increasing the amount of garbage coming from Illinois and especially Minnesota where no new landfills have been constructed for nearly a decade.

And so we are back to our original question, are bigger landfills better? Environmentally there were several concerns voiced... longer leachate lines could be more susceptible to failure, this could increase ponding of leachate in the landfill, which would increase the potential for leachate to move through a landfill's liner system and cause contamination of surrounding soil and groundwater. The civil engineers seem to have decided that this is not a great concern from past leachate line experience. Additionally, leachate lines are surrounded by washed gravel or similar material that should allow the leachate to drain to a central collection point, in the event that the original lines fail.

Second concern is the fact that bigger landfills would be cheaper, on a per ton of garbage basis, to build and maintain. This cheaper price makes reuse, recycling, and composting less attractive, and promotes our society's wasteful attitude towards resources. Probably the most that could be saved, however, by landfill operators is \$2-\$4/ton.

Third concern is what it will take to "remediate" these sites in the future, if we need to. With current technology "remediation" usually means excavating wastes and placing them into a "state of the art" landfill. Some efforts are now also being made in this area as Wisconsin landfills will soon have to have a "stabilization" plan. "Stabilization" generally means decomposing organic matter as much as possible, as fast as possible. Usually about half of the waste in a sanitary landfill is organic matter, such as paper products, food, etc...

The current technology for stabilization is of two primary types. The first recirculates leachate. The additional moisture promotes anaerobic decomposition, however anaerobic decomposition is relatively slow.

The second method, called a bioreactor, also recirculates leachate (and may add other liquids such as sludge), but also injects oxygen into the wastes which promotes aerobic decomposition. Aerobic decomposition is much faster than anaerobic, but the problem is, to date bioreactors have been fraught with operations problems and have not lived up to their projected decomposition potentials.

The reason for problems with bioreactors is probably plastics. In order for decomposition to effectively breakdown wastes, moisture and in the case of bioreactors, oxygen, must be able to reach all of the wastes. Anybody that has ever dug into a landfill with a backhoe can tell you that water never moves evenly through a pile of garbage... it goes around the plastics and concentrates into a few "funnels" and drains that way.

There are two proven ways to 'stabilize' garbage... one is by 'precomposting' such as in Columbia County or at the Highway G landfill in Vilas County. These folks tumble their garbage in a tube constructed from a cement kiln for several days. At the end of this, the organics have got a good start on composting which is aerobic decomposition.

The other way is through incineration, which is done in Barron and La Crosse Counties. The problem is that both of these methods tend to cost more than "regular" landfilling. The trade off is that these sites should be relatively "stabilized" and present fewer problems in the future.

And so, a big concern for building bigger landfills is will we really be able to "stabilize" them. If we can, then not a big deal... if we can't, future generations may have bigger messes to clean up in the future.

Focus On Plastic Shopping Bags

Brad Wolbert, DNR

Plastic shopping bags are beginning to receive a lot of attention in parts of the United States and in many other countries. Windblown bags, which effectively never break down in the environment, create litter problems and cause hazards to aquatic life. Those that are disposed of in a landfill act as barriers to the flow of liquids and prevent other wastes from breaking down. Plastic bags clog up machinery, and also use up valuable petroleum in their manufacture. They can be recycled — mostly into plastic lumber — but very few consumers recycle their bags.

San Francisco made the news recently with a proposal, passed by the City's Commission on the Environment, to place a 17-cent tax on each bag used in the city. The amount of the tax reflects a careful economic analysis of the costs of cleaning up and managing discarded plastic bags. More than 30 Alaskan towns have banned plastic bags outright, due to severe litter problems. Further afield, Ireland, Denmark, Switzerland and Taiwan tax bags to reduce the number used, and some localities in Germany and Sweden, as well as the countries of South Africa and Bangladesh, have banned them completely, the latter because the bags were clogging up drains and causing flooding.

Note from the Recycling News Newsletter editor:

The Fall 2004 Recycling News Newsletter featured an article submitted by Jeff Fielkow (Recycle America Alliance) on recycling of plastic bags. Recycling options are limited in most communities, but likely will increase over time. The Department urges you to remember the recycling hierarchy and first consider reducing your use of all disposable bags by using alternative reusable bags or reusing disposable bags. When plastic bags are used, call your local recycling program to find out where you can recycle them in your area.



What we hear about local recycling efforts

We encourage our readers to submit articles on successful or innovative recycling efforts in Wisconsin.

DePere High School recognized as Wisconsin's first Green and **Healthy School**

Christal Winter, DNR

Representatives from DNR and DPI recognized DePere High School for their efforts in becoming the first Wisconsin Green and Healthy School during a ceremony at the school on Earth Day. School staff, students, parents, and members of the community attended to congratulate the school on their accomplishment.

DePere High School first pledged to become a Green and Healthy School back in the Fall of 2004 and within six months they completed all the requirements of the program to qualify them as a Wisconsin Green and Healthy School. Christine Fossen-Rades, a teacher at DePere High School, and her environmental science class began the Green and Healthy Schools program in an effort to create a safer, healthier and more environmentally friendly learning environment. As part of the program, students discovered that the school was throwing away approximately 2,000 cans and bottles per week. Shocked by the information, students contacted Pat Meyer, buildings and grounds supervisor for DePere School District, to discuss options for promoting recycling. Through discussion with Pat, they revamped their commons recycling program, bought new large recycling bins and educated the school on the importance of recycling. Students also initiated a "Buckle Up" program and promoted a hand-washing campaign to reduce the spread of germs during the cold and flu season. The school has plans to continue their green

and healthy efforts this coming school year through a district-wide composting program aimed at reducing trash and creating chemical-free fertilizer for their gardens.

For more information on how schools in your community can get involved in the Wisconsin Green and Healthy Schools Program, please visit our web site http:// dnr.wi.gov/greenandhealthyschools/ or contact Christal Campbell at (608) 264-8976; christal.winter@dnr.state.wi.us).

City Of Wisconsin Rapids Highlights Recycling

Deb Pingel, DNR

In recent months, and months to come, the City of Wisconsin Rapids is making moves to increase their already good recycling rates. Over the past few months, the City has been notifying residents through various articles that they will be increasing their enforcement of the recycling ordinance. A change to the ordinance gives the Public Works Department enforcement power to issue municipal citations to any person who violates the provisions of the ordinance. In addition, upon default or refusal to pay such forfeiture, the person may be imprisoned for not more than 60 days or may have motor vehicle privileges revoked by law.

The City is continuing with their education efforts on several fronts. In the upcoming months, they will be accessing the local cable channel to air a video on recycling. They have prepared a mailing that will be sent to all utility customers (residential and non-residential) highlighting the changes in the recycling ordinance and the new enforcement provisions. The mailing will include a reminder on what materials are

recyclable and how to properly prepare the materials for recycling. And finally, the City is working with the local chamber/business associations to do outreach to businesses and apartments.

Kudos to the City of Wisconsin Rapids!!! The goal through all of this is to increase their recycling collection by 50% over the next year. We're looking forward to seeing the results!

What to do with all those LEAVES?!

Eileen Hocker, DNR

Every spring and fall we engage in the rituals of raking and sometimes bagging all those deciduous, wonderful leaves. Some people burn their leaves- but open burning is one of the chief contributors to air pollution in Wisconsin. The key to stopping leaf burning is composing and mulching. Most people know about composting, but sometimes people have too many leaves to compost or they don't have room for or don't want a compost pile. An alternative may be to mulch those leaves into your lawns. A joint effort by two Wisconsin cities, Wauwatosa and Brookfield, demonstrates that this is an easy, environmentally friendly and cost effective way of managing all those leaves. It's a win-win solution for everyone, most notably for vour lawn and Wisconsin's clean air!

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LEAVES Continued

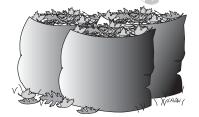
The Wauwatosa & Brookfield Experience

In the fall of 2004, a small group of residents from the cities of Wauwatosa and Brookfield joined in a test of leaf mulching as an alternative to leaf raking or burning. The findings showed the majority of participants (88%) felt that mulching was "very easy" or "somewhat easy" in terms of effort and compared to their previous method of leaf disposal. Residents found it took less time, required the same or less effort and was more satisfactory. Indications were that leaf mulching by mowing increased efficiency, and that people felt comfortable doing it. Wauwatosa and Brookfield intend to continue and expand the leaf mulching project this summer.

Why Leaf Mulching?

According to two separate studies done in the 1990s by Michigan State University Crops & Soil Science professor Tom Nikolai, and Purdue University Agronomy Department professors Zac Reicher & Glenn Hardebeck, mulching leaves directly into lawns is beneficial to the health of the lawns because it recycles nutrients back into the soil. This leads to a richer soil, causes lawns to green up faster in the spring, and provides a softer surface for physical activities.

One reason to mulch leaves is that Wisconsin's recycling law prohibits sending yard waste to landfills. Leaf mulching is



an easy way to manage leaf waste at home or in a public place for people who don't want to compost. The leaves don't have to be raked, or bagged - they only have to be mowed.

Another reason is the rising costs for leaf collection and composting by cities and other local governments. Municipal collections of leave, including the fuel & other operating costs of the collection vehicles, all add up to big expenditures. Two cities in Wisconsin, Brookfield and Wauwatosa, calculate leaf collection costs of between \$200,000 and \$250,000 per year.

But the chief motivator for mulching is its environmental benefits.

Environmental Benefits of Leaf Mulching

As stated earlier, studies show that leaf mulching returns valuable nutrients right back into our soils. Moreover, these same nutrients are those found in fertilizers that residents spend hundreds of dollars to put back onto their lawns. Mulching leaves reduces the costs of fertilizing and saves natural resources.

Leaf mulching protects the environment. It is a low cost and effective alternative to open burning of yard wastes. Open burning is one of the chief contributors to air pollution in Wisconsin. It's a significant source of particulates that can lodge deep in the lungs and contribute to asthma. Leaf burning also releases may toxic chemicals that we breathe directly. Communities should consider local ordinances prohibiting open burning of leaves and other yard wastes. Even in communities that allow burning, leaf composting and mulching are better alternatives that protect the environment. On-site mulching and composting reduce air pollution caused by burning or vehicles hauling leaves to a composting center. Finally, leaf mulching reduces water pollution caused by run-off of excess fertilizer placed on yards.

Little League Recycles Bottles. Cans

The West Madison

Brad Wolbert, DNR

Little League has

purchased 15 beverage container recycling bins specially designed for use at away-from-home events. They plan to offer recycling this season for the players and families who fill their stands 7 days a week from May to July. The previous program failed because the open barrels that were used for bottles and cans also collected so many food wrappers and other waste that the recyclables could not be processed. With the help of the local Department specialist, WMLL identified new bins that are designed to ensure that only recyclables are placed in them. This year, each trash station will have both a trash barrel and a recycling bin. The Department is working to demon-

Please contact Brad Wolbert at (608) 275-7769 or by email at brad.wolbert@dnr.state.wi.us, if you'd like more information about this program.

strate the effectiveness of this

events.

approach for other venues and

DNR Regional Recycling Contacts as of 4/05



Here is an updated list of DNR staff contacts for waste reduction and recycling along with the counties for which they are responsible. Please feel free to call with questions or to introduce yourself.

Regional Recycling Contact	Region Address	Counties Served
Marcy McGrath - 920/662-5493 e-mail marcy.mcgrath@dnr.state.wi.us fax 920/662-5913	Northeast Region 2984 Shawano Ave. Green Bay, WI 54307-0448	Brown, Calumet, Door, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano, Waupaca
Dave Misterek - 920/424-2104 e-mail david.misterek@dnr.state.wi.us fax 920-424-4404	Northeast Region Oshkosh Service Center 625 E. County Rd. Y Suite 700 Oshkosh, WI 54901-9731	Fond du Lac, Green Lake, Marquette, Outagamie, Waushara, Winnebago
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